WE CLAIM:

1. A heating source, comprising:

a combustion chamber enclosure including a plurality of panels defining a combustion chamber wherein combustion occurs, the combustion chamber being open at a front surface thereof and having a front portion adjacent the front surface;

a venting assembly having spaced apart first and second panels defining a venting enclosure, the first panel defining a top panel of the combustion chamber enclosure and including an aperture aligned with the front portion of combustion chamber, the second panel including an exhaust opening; and

a device providing a vacuum pressure at the exhaust opening whereby substantially all combustion gases present in the combustion chamber are drawn through the aperture in the first panel and into the venting enclosure, and from the venting enclosure out of the exhaust opening.

2. The heating source of claim 1, wherein the venting assembly further comprises a third panel having an aperture formed therein in alignment with the aperture in the first panel, the third panel being positioned between the first and second panels.

3. The heating source of claim 1, further comprising a heat exchanger configured to receive the combustion gases exhausted from the venting assembly and remove heat from the exhausted combustion gases.

4. The heating source of claim 1, further comprising a flow sensor configured to determine fluid flow out of the exhaust opening and provide a flow signal.

5. The heating source of claim 4, further comprising a combustion control device configured to control combustion within the combustion chamber in response to the flow signal.

6. The heating source of claim 1, wherein the first panel includes a plurality of apertures aligned with the front portion of combustion chamber.

7. The heating source of claim 1, wherein the third panel includes a plurality of apertures in fluid communication with the apertures of the first panel.

8. The heating source of claim 1, wherein the heating source is a fireplace.

9. A venting assembly for use with a heating source combustion chamber enclosure having a plurality of panels defining a combustion chamber for the combustion of fuel, the combustion chamber having an open front portion for the free flow of air into the combustion chamber, the venting assembly comprising:

a first panel configured as a panel of the combustion chamber enclosure and having an opening configured for the flow of fluid out from combustion chamber;

a second panel having an opening in fluid communication with the first panel opening and being spaced apart from the first panel to define a first venting chamber there between; and

a third panel having a vent pipe opening in fluid communication with the second panel opening and being spaced apart from the second panel to define a second venting chamber there between;

whereby the opening in the first panel provides an inlet for combustion gases from the combustion chamber into the first venting chamber, the opening in the second panel provides an inlet for combustion gases from the first venting chamber into the second venting chamber, and the vent pipe opening provides an outlet for combustion gases from the second venting chamber out of the venting assembly.

10. The venting assembly of claim 9, wherein the first panel opening is oriented in the front portion of the combustion chamber, and the fluids flowing through the first panel opening include combustion gases from the combustion chamber and air flowing in through the open front portion of the combustion chamber.

11. The venting assembly of claim 9, wherein the first, second and third panels are oriented generally parallel with each other.

12. The venting assembly of claim 9, wherein the first panel includes a plurality of openings oriented in the front portion of the combustion chamber, and the second panel includes a plurality of openings generally in alignment with the plurality of openings in the first panel.

13. The venting assembly of claim 9, further comprising a vacuum device providing a vacuum force at the vent pipe opening to draw the combustion gases through the venting assembly and out the vent pipe opening.

14. The venting assembly of claim 9, further comprising a flow meter configured to measure fluid flow out of the vent pipe opening.

15. A fireplace venting assembly configured to vent a heating source combustion chamber, the venting assembly comprising:

a first panel having a first opening formed therein;

a second panel having a second opening formed therein and being spaced apart from the first panel to define a first venting chamber, the first venting chamber being in fluid communication with the combustion chamber;

a third panel having a vent pipe opening formed therein and being spaced apart from the second panel to define a second venting chamber, the second venting chamber being in fluid communication with the first venting chamber; and

a device configured to provide a vacuum force at the vent pipe opening to draw air from the combustion chamber through the first and second venting chambers and out the vent pipe opening.

16. The assembly of claim 15, further comprising a heat transfer device in fluid communication with the vent pipe opening and configured to remove heat from the air drawn out the vent pipe opening.

17. The assembly of claim 15, wherein the first and second panels each include a plurality of openings.

18. The assembly of claim 15, wherein the combustion chamber includes a front portion open to the free flow of air into the combustion chamber, and the opening in the first panel is oriented adjacent the front portion of the combustion chamber.

19. A method of removing combustion gases from a combustion chamber enclosure that includes a top panel, defines a combustion chamber for the combustion of fuel, and includes an open front surface for the free flow of air into the combustion chamber, the method comprising the steps of:

forming a first opening in the top panel, the first opening providing a fluid flow path out from a front portion of the combustion chamber;

positioning a housing member over the first opening, the housing member defining a venting chamber and an exhaust opening whereby fluid communication exists between the combustion chamber and the exhaust opening; and

applying a suction force at the exhaust opening to draw substantially all combustion gases produced in the combustion chamber into the venting chamber and out the exhaust opening.

20. The method of claim 19, further comprising positioning a middle panel in the housing member to divide the housing member into first and second vent chambers, the first vent chamber being in fluid communication with the opening in the top panel, and the second vent chamber being in fluid communication with the exhaust opening, the middle panel including an opening providing fluid communication between the first and second vent chambers.

21. The method of claim 20, further comprising aligning the opening in the middle panel with the opening in the top panel.

22. The method of claim 19, further comprising the step of removing heat from the exhausted combustion gases with a heat exchanger.

23. The method of claim 19, further comprising monitoring the flow of combustion gases out of the exhaust opening with a flow sensor and providing a flow signal.

24. The method of claim 23, further comprising controlling combustion in the combustion chamber in response to the flow signal.

25. An air safety system for use with a heating source of the type including an open front surface for the free flow of air into and out of a combustion chamber of the heating source, the system being configured to draw substantially all combustion gases produced in the combustion chamber out of the fireplace through an exhaust opening, the safety system comprising:

a flow sensor configured to measure fluid flow out of the exhaust opening and provide a flow signal; and

a combustion control device configured to control combustion in the combustion chamber in response to the flow signal.

26. The system of claim 25, wherein when the flow signal indicates fluid flow below a predetermined rate, the combustion control device shuts off combustion in the combustion chamber.

27. A method of extracting heat from a combustion chamber of an open fireplace during combustion of fuel in the combustion chamber, the method comprising the steps of:

emanating radiant heat out of the combustion chamber through the opening of the fireplace;

drawing substantially all combustion gases and heated air from the combustion chamber through a venting assembly;

removing heat from the drawn combustion gases and heated air with a heat transfer device.

28. The method of claim 27, wherein the emanating step includes emanating infrared heat from panels that define the combustion chamber and a burner plate assembly of the fireplace.

29. The method of claim 27, wherein the venting assembly includes a first opening into the combustion chamber that is oriented near a front portion of the combustion chamber, and the drawing step includes providing a vacuum force at the first opening.